IMPROVING RESEARCH AND REGULATORY PRIORITIES FOR LOW-LEVEL RISKS

Background

Over the past decade, public concern about risks from low-level exposures to agents known to be toxic in high concentrations has led to increasing regulation of such exposures. While regulation of some typical low-level risks, such as air pollutants and ionizing radiation, has had a significant impact on operations of the electric utility industry for a number of years, other low-level agents have been coming under regulatory control. We expect that during the coming decade, the costs to industry of controlling public and occupational exposure to potentially hazardous agents, such as chemicals and perhaps electromagnetic radiation, will rise sharply.

Based on the existing approach to the control of such risks, for example in the regulation of exposures to carcinogens in the food supply and in the work place, it is our impression that a coherent national policy for risk management has not yet emerged, and that the present approach is often inconsistent, unpredictable, and poor in its use of available scientific information. It is our concern that a continuation of present approaches would lead to substantial uncertainties in the assessment of the merit of alternative energy technologies by industrial

management, and inefficient use of financial resources nationally, as well as possibly resulting in an unwise distribution of risks among our population.

Approach

These public health issues extend to many public organizations in addition to industries, so it appears desirable to approach the social management of low-level risks in a general but systematic way. For this reason, we seek the recommendations from a small group of prominent experts in a variety of fields relating to the management of these risks. Our initial step is to hold a small workshop, with 25 or fewer people, to address the following questions:

- What is wrong with the present methods of controlling low-level health risks?
- What are the key constraints, (e.g., economic, scientific, political, institutional) to improvement in these methods?
- 3. What characteristics would an ideal system for controlling these risks have?
- 4. What improvements are feasible?
- 5. Where can research help?
- 6. Should there be a national research plan and how should responsibilities be allocated?
- 7. What should be the next step?
- 8. What can this group do?

The invited participants should be prepared to give their views on these and related questions.

This workshop is intended to provide guidance for establishing research programs in the following general areas:

I. Risk Evaluation:

- 1. Improved data base for and methods of risk estimation.
- 2. Criteria for interpreting risk estimates.

Ex: Voluntary vs involuntary; background vs man-made.

II. Risk Management:

1. Economic forces

Ex: Product performance;
 liability;
 insurance.

- 2. Regulation
- 3. Social value criteria for trade-offs and choice of risk management methods.

Ex: Health, economic welfare, physical security, equity.

The workshop discussions will be chaired by designated participants, and attending staff members will distill the comments to provide a summary of the ideas developed.